



## Original communication

## Homicide among Indigenous South Australians: A forty-year study (1969–2008)

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## ABSTRACT

A retrospective review of homicide cases among Aboriginal people in South Australia examined at Forensic Science SA was undertaken over a 40-year period from 1969 to 2008. A total of 90 Indigenous homicide victims were identified compared to 599 non-Indigenous victims over the same time period. Although homicide rates have fallen, the Indigenous homicide rate (ranging from 73.5 to 223.97 per 100,000) significantly exceeded the non-Indigenous rate (ranging from 8.16 to 12.6 per 100,000) for all decades ( $p < 0.001$ ). The most common methods of homicide in the Indigenous population involved blunt force and sharp force trauma, with gunshot, strangulation and other forms of homicides being encountered less often. While lack of access to firearms may explain the lower numbers of gunshot deaths it would not explain the low numbers of deaths due to strangulation. Considerable variability may, therefore, exist in the types of unnatural deaths that may be found in different cultural and ethnic groups, even within the same community.

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## 1. Introduction

A recent study of deaths due to suicide among Indigenous South Australians over a five year period from 2005 to 2009 found a surprising uniformity in the chosen method; i.e. of the 28 cases evaluated, all had died from neck compression due to hanging.<sup>1</sup> There was also a disproportionately high number of Aboriginal victims (19.4%) in a study of adolescent asphyxial deaths, compared to the general South Australian population, where this group accounted for only 2.2–3.2%.<sup>2</sup> Given that significant differences were occurring in certain types of deaths in this cultural group, a study was undertaken of homicides within the same population, to ascertain whether there were any differences compared to the non-Indigenous population, and whether any changes had occurred over time.

## 2. Methodology

A retrospective review of all cases of homicide involving Australian Aboriginal or Indigenous victims registered at Forensic Science SA was undertaken over a 40-year period, from January 1969 to December 2008. The case files were reviewed and the age,

sex, circumstances of death and method of homicide were collated. All cases had undergone full police and coronial investigations and autopsies. Deaths where the manner was not clear from the case files were excluded. The rate and method of homicide in non-Indigenous South Australians was evaluated for comparison purposes.

Data were divided into four time periods: 1969–1978, 1979–1988, 1989–1998 and 1999–2008. Total numbers of cases and rates per 100,000 of the population were recorded. Statistical analyses were conducted using Statistica (Statsoft version 7) and SPSS (Pearson version 17.0) with Pearson's Chi-square tests ( $\chi^2$ ) and Student *t*-tests. Statistical significance was taken at  $p < 0.05$ .

Forensic Science SA is the South Australian state forensic facility where medicolegal autopsies are performed. The population served is approximately 1.6 million, including 28,055 individuals who are listed by the Australian Bureau of Statistics as Aboriginal.<sup>3</sup>

It is recognised that data capture in this study may be incomplete as not all cases of Indigenous deaths may have been included due to insufficient evidence of cultural and racial background at the time of autopsy. In addition only those cases where a body had been found and an autopsy was performed were included in the study.

## 3. Findings

A total of 90 (13%) Indigenous homicide victims were identified (male: female = 1.8:1; male age range = 17–62 yrs, ave = 34.8 yrs;

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**Table 1**

Total numbers of homicides in non-Indigenous and Indigenous groups per decade and by gender in South Australia from 1969 to 2008.

	Total	1969–1978	1979–1988	1989–1998	1999–2008
Non-Indigenous	599	100	148	182	169
Indigenous	90	14	27	31	18
Male					
Non-Indigenous	370	48	94	117	111
Indigenous	58	8	19	20	11
Female					
Non-Indigenous	229	52	54	65	58
Indigenous	32	6	8	11	7

female age range = 17–56 yrs, ave = 34.4 yrs). This compared to 599 (87%) non-Indigenous victims (male: female = 1.6:1; male age range = 16–91, ave = 39.63; female age range = 16–92, ave = 39.73). There were consistently higher numbers of non-Indigenous homicide victims compared to Indigenous victims over all four decades (Table 1). However, when converted to a rate per 100,000 for each population group, the Indigenous homicide rate significantly exceeded that of the non-Indigenous population for all decades (73.5–224 compared to 8.2–12.6 per 100,000) ( $p < 0.001$ ) (Table 2).

The most common methods of homicide in the Indigenous population involved blunt (41%) and sharp force (36%) trauma, with gunshot (13%), strangulation (2%) and other forms of homicides (8%) (grouped together as miscellaneous) being less common (Table 3). While Indigenous males suffered more than double the numbers of lethal sharp force trauma, and more than 10 times the number of firearm deaths compared to Indigenous females, numbers of blunt force trauma deaths were similar (M:F = 1:1) (Table 4).

Given variable toxicological investigations over the 40-year time span of the study, no evaluation of toxicological findings was undertaken.

#### 4. Discussion

The higher homicide rate amongst Indigenous groups in Australia has been previously recognised and has now been shown in this study to have occurred in South Australia over at least four decades. Indigenous homicides nationally accounted for 13% of the overall homicide rates in 2006–2007 even though the Indigenous population comprised only 2% of the Australian population.<sup>4</sup> Similar trends have been observed in Canada with Indigenous individuals comprised 3% of the population but 25% of all homicide offenders.<sup>5</sup> Suggested reasons for this disparity involve issues of poverty, unemployment, drug and alcohol abuse, and social inequality.<sup>6,7</sup>

The most common methods of homicide in Australia involve sharp force trauma (47%), blunt force trauma (31%), firearms (10%), miscellaneous methods (10%) and strangulation 2%. Females have lower rates of sharp force (32%) and blunt force (23%) deaths with

**Table 2**

The rate of homicide per 100,000 in non-Indigenous and Indigenous groups per decade in South Australia from 1969 to 2008.

	Total number	1969–1978	1979–1988	1989–1998	1999–2008
Non-Indigenous	599	8.2	11	12.6	11.2
Indigenous	90	155.4	224	169.1	73.5

**Table 3**

Total number of Indigenous homicides in different categories from 1969 to 2008.

	Blunt trauma	Sharp trauma	Firearms	Strangulation	Miscellaneous
1969–2008	37	32	12	2	7
1969–1978	9	2	2	1	0
1979–1988	11	10	4	1	1
1989–1998	10	12	5	0	4
1999–2008	7	8	1	0	2

higher numbers of strangulations (13%).<sup>4</sup> In contrast, the Indigenous population of South Australia has significantly higher proportions of blunt force homicide among both males and females (41%). This was particularly so amongst Indigenous females where 56% of deaths were due to blunt force trauma, with only 3% of deaths due to strangulation.

Legislation may influence the prevalence of certain categories of homicide. For example, the variation in the percentage of deaths attributed to firearms around the world is possibly influenced by laws limiting availability. In the United States and Canada, gunshot homicides predominate, whereas firearm deaths are much less common in the United Kingdom and Australia where there are stricter laws on firearm ownership.<sup>7–9</sup>

Although the absolute numbers of Indigenous homicides have not altered significantly over the time period of the study (14 in 1969–1978 and 18 in 1999–2008) the rate has declined markedly from 155.4 to 73.5 over this period with the increase in the Indigenous population (from 10,714 in 1976 to 23,425 in 2001).<sup>10</sup> Reasons for this decline are unclear, although restricted sales of alcohol in traditional communities may have had some effect in reducing violent crime.

A well-recognised problem with a retrospective study of Indigenous deaths is in trying to determine who should be classed as Indigenous, or not. However, as it is quite likely that not all Indigenous homicides were identified, the markedly increased rates compared to the non-Indigenous population are even more striking.

Although the numbers are small, this study has shown that while homicide rates are significantly higher among Indigenous South Australians, the rate has decreased over the past four decades. The usual male predominance in gunshot and stabbing homicides that characterizes most groups was also found among Indigenous males, however the significant number of females who died from blunt force trauma made this the major category amongst women. Strangulation and gunshot deaths were much less common among Indigenous females. While lack of access to weapons may explain the lower numbers of gunshot deaths it would not explain the lower numbers of deaths due to strangulation. The great variability that exists in the types of unnatural deaths that may be found in different groups underscores the need to analyse carefully pooled national data so that regional, cultural and ethnic trends are not missed.

**Table 4**

Total number of Indigenous homicides per gender and subcategory 1969–2008.

Decade	Blunt force		Sharp force		Firearms		Strangulation		Miscellaneous	
	M	F	M	F	M	F	M	F	M	F
1969–2008	19	18	23	9	11	1	1	1	4	3
1969–1978	4	5	1	1	2	0	1	0	0	0
1979–1988	8	3	7	3	4	0	0	1	0	1
1989–1998	4	6	9	3	5	0	0	0	2	2
1999–2008	3	4	6	2	0	1	0	0	2	0

**Conflict of interest**

The authors assert that they have no conflict of interest of financial interests in this study.

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**Ethical approval**

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